ORIGINAL COMMUNICATIONS

THE EFFECTS OF CHILD ABUSE AND RACE ON RISK-TAKING IN MALE ADOLESCENTS

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This study explores the effects of abuse on the risk-taking behaviors of 2973 black and white adolescent males, 412 of whom were sexually or physically abused. Surveys on mental and physical health, risk-taking behaviors and attitudes, and family living were administered to 9th and 12th graders in an urban midwestern state. The surveys included questions on past history of sexual and physical abuse. More black than white males reported experiencing incest, extrafamilial sexual abuse, and physical abuse. As for outcome risk-taking behaviors, blacks were more likely to use illegal substances, run away, skip school, attempt suicide, force partners into sex, and commit violent acts; however, the racial effects decreased when abuse histories were taken into consideration. Whites were more likely to drink and drive, and to drink before having sex; abuse history did not decrease this racial effect. Abuse but not race was predictive of drinking and of having serious drinking problems. The results point to the importance of pediatricians, psychologists, and other healthcare workers, as well as those in the legal and criminal justice system screening for a history of abuse among adolescents who demonstrate

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these or other risk-taking behaviors. (*J Natl Med Assoc.* 1993;85:593-597.)

Key words • sexual abuse • physical abuse • incest • risk-taking behavior

Sexual and physical child abuse has received increasing attention among physicians, psychologists, and sociologists over the past several years, particularly in light of the risk-taking, antisocial, and self-injurious consequences abuse can cause during the adolescent and adult years. To date, much of the research has focused on females. 1-3 Nevertheless, the prevalence rate of male sexual abuse is not insignificant; it ranges from 3% to 50%, depending on where the statistics were gathered and on how the questions were asked.⁴⁻⁸ Mental health clinics show particularly high representations. 9-10 In sexually transmitted disease clinics, one in five men report past sexual abuse.11 In psychiatric populations, the prevalence is much higher. 10 Social role expectations work against male reporting of the abuse and also against caretakers identifying it; inasmuch as males are expected to be self-reliant and strong, being identified as sexually abused is viewed by many to represent a lack of masculinity, homosexuality, or mental weakness, perceptions that serve to exacerbate feelings of anger, shame, and helplessness when abuse does occur. 12 In addition, the problem of defining what actually constitutes abuse of young males leads to underreporting.

Child abuse is a pediatric health-care problem not only because of its physical effects, but also because of its potentially devastating psychological effects. "Depression and self-destructive behavior, anxiety, feelings of isolation and stigma, poor self-esteem, difficulty in trusting others..." and a high incidence of suicide

	Black ((n = 426)	White (n = 5223)				
	Males (n = 255)	Females (n = 171)	Males (n = 2679)	Females (n = 2544)			
Incest	13 (5%)	18 (11%)	35 (1%)	156 (6%)			
Physical abuse	52 (20%)	33 (19%)	218 (8%)	382 (15%)			
Sexual abuse outside the home	25 (10%)	31 (18%)	69 (3%)	303 (12%)			
Total abused	90 (51%)	82 (49%)	322 (29%)	841 (71%)			

TABLE 1. MALE AND FEMALE ADOLESCENTS WHO REPORTED SEXUAL ABUSE

attempts are noted as consequences of sexual abuse. ^{13,14} Noteworthy consequences for males are affective numbing, repetitive and inappropriate sexual behaviors, sexual dysfunction, behavioral risk-taking, and post-traumatic stress syndrome, which is often accompanied by substance abuse and aggression. ¹⁵⁻²⁰

Differences in abuse patterns by gender and race have been noted in the literature. Black children are at higher risk of abuse than white children, particularly black males. ²¹ Children from single-parent households and of lower socioeconomic status are more common targets, as are children with physical, neurological, or emotional problems²²; black males are overrepresented in all those situations. ²¹ Abuse starts at a younger age for black children, which is noted to have more devastating effects than abuse at older ages. ^{14,23} Although age of onset of abuse is similar across genders, girls are generally abused up to an older age, as boys begin to fend off abusers sooner. Actual or attempted intercourse is more common with boys, as is extrafamilial abuse. ^{21,24}

Child physical abuse is noted to show its consequences in problems of adjustment, cognitive and motoric lags, and psychiatric problems, which include antisocial behaviors and aggression.^{25,26} Violence at the hand of an adult can lead to suppressed anger and lack of trust of adults or of other males. Studies of juvenile delinquent populations show that 72% to 92% experienced serious childhood physical abuse.²⁷⁻²⁹ Sexual abuse that includes force or physical violence can have more serious long-term effects; the combination of physical and sexual abuse occurring before the age of 12 is correlated more highly with hostility, anxiety, later drug abuse, juvenile delinquency, and criminal behavior than is either type of abuse alone.³⁰⁻³² Finally. 80% of male perpetrators of sexual abuse have a history of childhood sexual abuse themselves; that figure in itself points to the importance of early identification and treatment among males.6

In light of the disproportionate number of black males in the legal system and of the disproportionate number of black males abused as children, the present study was undertaken to explore how much of the risk-taking behaviors of black males could be explained by a history of child sexual or physical abuse.^{21,33}

METHOD

In 1989, a survey instrument was administered to 84% of all 9th and 12th graders in Minnesota public schools. The anonymous, self-administered, paper-and-pencil questionnaire was completed in classrooms with school personnel present. Informed consent was obtained from the students and their legal guardians. Questionnaires used in the analyses come from a computer-generated random sample of 10% of the white adolescents completing the surveys, together with all black and American-Indian adolescents. This included 5730 students—2973 males and 2757 females.

The survey instrument included questions on risktaking behaviors, family history, and history of abuse. The question on incest asked "Has any older or stronger member of your family ever touched you sexually or had you touch them sexually?" The question on extrafamilial sexual abuse asked "Has any adult or older person outside the family ever touched you sexually against your wishes or forced you to touch them sexually?" The question on physical abuse asked "Has anyone in your family ever hit you so hard or so often that you had marks or were afraid of that person?" The variable called sexual abuse included incest and extrafamilial abuse. The criteria for having drinking problems were that a subject had four or more symptoms of alcohol abuse, such as blacking out, passing out, or inflicting injury to self or others, in addition to drinking at least once a week.

RESULTS Epidemiology of Abuse by Race and Gender

Results showed that more black males than white males experienced the three forms of abuse both separately and additively. Furthermore, in the black sample, a greater proportion of those abused were male; 51% of the abused black adolescents were males, while

TABLE 2. RACE OF MALES WHO WERE ABUSED

Type of Abuse	Black Males	White Males	Total
Incest	13 (23%)	35 (76%)	48 (100%)
Sexual abuse outside the home	25 (27%)	69 (80%)	94 (100%)
Any sexual abuse	51 (23%)	153 (73%)	204 (100%)
Physical abuse	52 (19%)	218 (80%)	270 (100%)
All three types of abuse	7 (41%)	10 (58%)	17 (100%)
Total abused	90 (19%)	322 (81%)	412 (100%)
Total in sample	265 (9%)	2708 (91%)	2973 (100%)

TABLE 3. THE EFFECTS OF RACE ALONE ON RISK-TAKING BEHAVIORS, AND THE EFFECTS OF SEXUAL AND PHYSICAL ABUSE AND RACE ON RISK-TAKING BEHAVIORS

Race Alone			Sexual Abuse		Physical Abuse		Race		Model				
Behavior	β	SE	χ^2	β	SE	χ 2	β	SE	χ2	β	SE	χ2	χ2
Drinking Drinking problem Drinking/driving Drinking/sex	.00 .17 – .17 – .14	.03 .11 .04 .04	.00 2.3 11.8‡ 15.4‡	41 -1.9 64 43	.14 .43 .18 .23	8.5* 19.7‡ 12.2‡ 3.5§	.06 64 07 .19	.12 .43 .17 .17	.27 2.2 .16 1.4	.01 .07 19 15	.03 .11 .05 .03	.15 .43 15.5‡ 16.1‡	9.51† 23.88‡ 26.86‡ 19.87‡
Using drugs Forcing sex Causing pregnancy	.06 .25 .37	.03 .05 .05	3.5† 18.2‡ 52.3‡	-1.2 -2.04 -1.46	.19 26.6 .27	39.4‡ 59.7‡ 28.0‡	39 67 46	.13 .25 .24	8.5* 7.2‡ 3.7†	.03 .16 .31	.03 .06 .05	1.1 6.5* 33.5‡	49.97‡ 82.70‡ 112.63‡
Running away Skipping school Attempting suicide Physical violence	.33 .11 .10 .13	.07 .04 .05 .03	17.7‡ 5.8‡ 4.4† 11.9‡	-2.6 -1.1 -1.2 58	.33 .24 .23 .22	58.7‡ 19.5‡ 28.5‡ 6.58*	17 -1.5	.33 .19 .16 .15	17.8‡ .75 91.6‡ 31.9‡	.14 .07 .009 .10	.09 .05 .05 .04	2.2 2.7 .03 6.3*	96.88‡ 25.01‡ 139.28‡ 54.59‡

^{*}P<.01.

only 29% of the abused whites were male (Table 1). In the white sample, 3% of males and 12% of females reported extrafamilial sexual abuse, 1% of males and 6% of females reported incest, and 8% of males and 15% of females reported beatings at home. In the black sample, 5% of males and 11% of females experienced incest, 10% of males and 18% of females experienced extrafamilial sexual abuse, and 20% of males and 19% of females reported being beaten at home (Table 2). While only 9% of the males in the entire sample were black, they represented 19% of the males who were sexually abused, 23% of the males who were sexually abused, 27% of the males who were sexually abused by a relative, and 41% of the males who suffered all three kinds of abuse.

Substance Abuse

Drinking, which was illegal for all of the teens in this sample due to their age, tended to be more common for whites, but not significantly so; drinking was significantly more common among those who were sexually abused (Table 3). Having a drinking problem was

related to sexual abuse and not to race; there were, however, only 37 teens in this sample with serious drinking problems. Driving after drinking was associated with a history of sexual abuse and with being white. After taking sexual abuse history into account, there was still a racial effect. Drinking before having sex, known to be a risk factor for pregnancy and for the spread of acquired immunodeficiency syndrome (AIDS) and other sexualy transmitted disease, was significantly related to being white and also to having a history of sexual abuse. With abuse history in the model, being white was still a significant risk factor. Substance abuse was more likely among blacks and among those who were sexually and physically abused; when abuse history was taken into account, the racial effect disappeared.

Sexual Behaviors

In regard to sexual behavior, blacks were more likely to be sexually active. Even among those who were not sexually abused, the blacks were more sexually active. For black males, the mean age of first intercourse was

[†]*P*<.05.

[‡]P<.001.

 $[\]S P = .06.$

13 compared with 14.7 for white males (T(151,1063) = -9.54, P < .0001). Blacks were more likely to have gotten someone pregnant. Having been sexually abused and having been physically abused also were significantly related to getting someone pregnant; even when abuse history was taken into consideration, there was still a racial effect. Of those who were sexually abused outside the home, 38% of blacks and 24% of whites got someone pregnant at least once; this difference was not statistically significant. Of those who were not sexually abused, 16% of black males and 5% of white males reported getting someone pregnant.

Having been physically abused or sexually abused were significantly related to forcing someone to have sex against their will. Blacks did this significantly more, even when abuse was taken into consideration. Looking at males with no sexual abuse history, 8% of black males and 4% of white males forced sex. Of the males who were sexually abused outside the home, 45% of the blacks and 30% of the whites forced someone into sex; this difference was not significant. Of the males who were incest victims, 63% of the blacks and 26% of the whites forced someone into sex.

Delinguency

Blacks were significantly more likely to commit acts of violence as were those with sexual and physical abuse histories; when abuse was taken into consideration, there was still a racial effect.

Other Behaviors

Blacks were more likely to have run away from home; those who had been sexually or physically abused were also more likely, and when abuse history was taken into consideration, race was no longer a predictor. Blacks were also more likely to skip school, and so were those who had sexual abuse histories; when abuse history was taken into consideration, race was no longer a predictor. Blacks were more likely to have attempted suicide; those who had been sexually abused or physically abused also were more likely, and when abuse history was taken into consideration, race was no longer a predictor of attempted suicides.

DISCUSSION

The analyses identify sexual and physical abuse as important moderating factors in the risk-taking behaviors of adolescents. While analyses by race demonstrate markedly greater risk-taking among black adolescents, once sexual and physical abuse are included in the model, the racial differences become less marked.

While causal relationships are difficult to ascertain from cross-sectional data, these data point to the importance of sexual and physical abuse as moderators. For example, based on the bivariate analysis, blacks were significantly more likely to engage in 7 of the 11 risk-taking behaviors; when sexual and physical abuse also were considered, the effect of race decreased in 6 of those 7 risk-taking behaviors. The addition of sexual and physical abuse into the models did not alter the greater likelihood of whites engaging in the three behaviors related to drinking.

As significant as the findings are, they probably underestimate the problem. It is expected that the subjects in our data set may be more intact emotionally and come from more functional households than their counterparts who have dropped out of school and consequently did not complete the survey. Homeless male youth, who were not included in this sample, have disproportionately high rates of multiple abuse histories, including neglect, most of which was never reported to authorities; often, males who run away specifically do so to avoid abuse at home. As child abuse is so often underreported, it is expected that many of the respondents in our data set reported risk-taking behaviors or emotional problems while falsely denying histories of abuse.

Overall, the results of this study have ramifications for understanding the attitudes and behaviors of black male adolescents who present themselves in health-care, educational, or recreational settings as oppositional or untrusting. The results point to the importance of screening for abuse, particularly when the abuse may be ongoing or occurring to siblings or other children, and to follow through with reports and recommendations for treatment.

Certain factors related to sexual abuse could not be studied using our data but should be included in future surveys. We do not know the relationship between the abuse perpetrators and the children, the extent of the abuse, or at what age the abuse occurred. A recent clinical study suggests that those factors are important to understanding the emotional effects of abuse.³⁴ While the differential effects of incest and extrafamilial abuse were not highlighted in this article, other studies have shown that victims of incest are less outwardly destructive than those who experience extrafamilial abuse, possibly because incest may include some messages of caring and may involve less threat of violence than does extrafamilial abuse.

Whenever self-report abuse questions are asked, there may be a definition problem, especially when comparing across studies. The questions range from whether one was forced to have intercourse to whether one was fondled or shown pornographic materials. The questions asked in this survey were fairly generic, leaving the interpretation of abuse to the respondent. In fact, one must always keep in mind the perceptual aspects of self-report surveys on abuse: a child of nonviolent, reserved parents may see corporal punishment or coercive sexual advances as more abusive than a child from a more physical or a rougher family and neighborhood. This may add to the inconsistent rates of reporting cited across studies.

The purpose of this study was to help clarify some of the "red flag" symptoms of child abuse among adolescent males. In a large survey study such as the one reported here, there was no opportunity to follow-up the questionnaires with one-on-one interviews for adolescents who exhibited the emotional or behavioral "red flag" behaviors. However, physicians, educators, and other professionals working with adolescents do have that opportunity, and ideally can halt the abuse and hinder its long-term destructive effects.

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